



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.								
10/528,506	03/18/2005	Masanori Ogawa	2710/74093	4351								
7590 Donald S Dowden Cooper & Dunham 1185 Avenue of the Americas New York, NY 10036	09/19/2007		<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">BALDWIN, GORDON</td></tr><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>1775</td><td></td></tr></table>		EXAMINER		BALDWIN, GORDON		ART UNIT	PAPER NUMBER	1775	
EXAMINER												
BALDWIN, GORDON												
ART UNIT	PAPER NUMBER											
1775												
			<table border="1"><tr><td>MAIL DATE</td><td>DELIVERY MODE</td></tr><tr><td>09/19/2007</td><td>PAPER</td></tr></table>	MAIL DATE	DELIVERY MODE	09/19/2007	PAPER					
MAIL DATE	DELIVERY MODE											
09/19/2007	PAPER											

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/528,506

Applicant(s)

OGAWA ET AL.

Examiner

Gordon R. Baldwin

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Concerning claim 1, it is not clear from claim one what exactly the core member is made of from the selection provided. Specifically, lines 5 –10 of claim one there seems to be three different sets of materials that can make up the core material which also seem to indicate Markush groups for each particular one, but the sentence structure leaves the exact determination of what combinations of materials the core can be made from vague and indefinite. Additionally, the engineering plastic for the sake of examining purposes can be its own constituent of the core material, rather than being a combination of other materials.

Additionally, the use of the terms, “rubbery” and “rubber-like” are considered to be vague because it is not understood in what way the item is rubbery or rubber-like. It could be a polymer or could have flexibility like rubber or melting points close to a rubber.

Claim Rejections - 35 USC § 102

Art Unit: 1775

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanmartin (U.S. Pat. No. 4,937,125).

Consider claims 1-4, 7, 9-12, Sanmartin teaches a core material made of polyester and polysulfones, polyethersulfones in a panel structure with a first, second and third layers, where the first and third layers consist of glass or aramide fiber reinforced resins where the resins include epoxy, polyester, phenolic and fire-proof or phenolic vinylester resins and the resin incorporated in the third layer is a fireproof epoxy resin. The second layer (core layer) is taught to be a honeycomb structure made of a thermoplastic material including polypropylene, polyethylene and their copolymers, polycarbonates, acrylonitrile/butadiene/styrene polymers (considered to include a styrenic elastomer), polysulfones, polyethersulfones and liquid crystal polymers, in addition to the honeycomb core being made of polypropylene. (Col. 3 lines 35-55)

As for claim 3, the claiming for the variety of processes to form the shape is considered to be a product-by-process limitation, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product

Art Unit: 1775

was made by a different process.”, (In re Thorpe, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious different between the claimed product and the prior art product (*In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

Consider claim 10, Sanmartin's teaching of the use of a glass fiber in the core covering layer is considered to be a porous material. (Col. 3 lines 35-45)

Claims 1, 3, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Moeller (U.S. Pat. No. 3,007,834)

Consider claims 1, 3, 7 and 9, Moeller teaches a honeycomb structure (in a grid structure) (20) pressed between a pair of heated plates (24 and 25), with the honeycomb being made of a thermoplastic resinous material including polystyrene, polyethylene and polypropylene. (Col. 2 lines 30-40)

As for claim 3, the claiming for the variety of processes to form the shape is considered to be a product-by-process limitation, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.”, (In re Thorpe, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be

Art Unit: 1775

the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product (*In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

Claims 1-3, 5, 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Therrien (U.S. Pat. No. 4,567,076)

Consider claims 1-3, 5, 7, Therrien teaches a structure with a honeycomb core layer (8 and Fig.1) and two outer laminate layers, where the honeycomb core layer may be made from any reinforced composite material such as a glass fiber (considered to be a compatibility agent as stated in applicant's specification pg. 8) along with a reinforced polyimide core with the laminated layers (4 and 6) being a graphite reinforced epoxy. (Col. 7 lines 32-46)

As for claim 3, the claiming for the variety of processes to form the shape is considered to be a product-by-process limitation, even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.", (*In re Thorpe*, 227 USPQ 964,966). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious

Art Unit: 1775

different between the claimed product and the prior art product (*In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983), MPEP 2113).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanmartin (U.S. Pat. No. 4,937,125) as applied to claims 1-4 above, and further in view of Jordan (U.S. Pat. No. 5,791,118).

Consider claims 5, 6 and 8, Sanmartin teaches the claimed invention above, but does not specifically teach that the core member can be a corrugated sheet or where the core member is molded to form a sheet forming a number of projections. However, Jordan teaches a structure with an outer face sheet (11) and a thin inner face sheet (12) with a thin corrugated core sheet (13) (which is considered to teach a number of projections since each node is considered to project from the core structure), where the outer, inner and core sheet is made of a fiber reinforced composite material like glass or carbon fibers embedded in a polyester. (Col. 4 lines 35-47) The addition of carbon fibers to the core and the covering member of Jordan are considered to be compatibility aid agents. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine Sanmartin and Jordan, to make a plastic

Art Unit: 1775

cardboard panel with superior resistance to impact without permanent damage.

(Jordan, Col. 1 lines 15-20)

Response to Arguments

Applicant's arguments, filed 7/3/2007, with respect to 35 U.S.C. 102(b) rejection with Therien and Jordan have been fully considered and are persuasive. The 35 U.S.C. 102(b) rejections of Therien and Jordan have been withdrawn. .

Applicant's arguments filed 7/3/2007 in regard to the 35 U.S.C. 102 (b) rejections using Sanmartin and Moeller have been fully considered but they are not persuasive. Since both Sanmartin and Moeller teach the use of the same materials in the same application, a plastic cardboard with a core, they are considered to have the same attributes as the applicant's invention. The applicant has not shown why their combinations would have better heat and modability than the cited references. The applicant has argued that that the references do not necessarily disclose good heat resistance and moldability, the prior art references have similar claimed material and would have similar characteristics to the applicant's claimed invention. Therefore, this argument lacks credibility due to its lacking of an objective standard to measure the applicant's invention versus the cited prior art.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 1775


TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon R. Baldwin whose telephone number is (571)272-5166. The examiner can normally be reached on M-F 7:45-5:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GRB


JENNIFER C. MCNEIL
SUPERVISORY PATENT EXAMINER
9/14/12

Application/Control Number: 10/528,506
Art Unit: 1775

Page 10

GRB